

ABSTRACT

A gallium nitride semiconductor laser device has an active layer (6) made of a nitride semiconductor containing at least indium and gallium between an n-type cladding layer (5) and a p-type cladding layer (9). The active layer (6) is composed of two quantum well layers (14) and a barrier layer (15) interposed between the quantum well layers, and constitutes an oscillating section of the semiconductor laser device. The quantum well layers (14) and the barrier layer (15) have thicknesses of, preferably, 10 nm or less. In this semiconductor laser device, electrons and holes can be uniformly distributed in the two quantum well layers (14). In addition, electrons and holes are effectively injected into the quantum well layers from which electrons and holes have already been disappeared by recombination. Consequently, the semiconductor laser device has an excellent laser oscillation characteristic.